

REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of August 29, 2003.

All of the Examiner's objections and rejections are traversed.

Reexamination and reconsideration are respectfully requested.

The Office Action

Claims 1-5, 7-12 and 17 remain in this application. Claim 6 has been cancelled. Claims 13-16 and 18-20 have been withdrawn from the present application.

Claims 4 and 8 are objected to because of typographical errors. The Applicant thanks the Examiner for pointing these out and has made the necessary corrections to the claims.

Claims 3 and 10 are rejected under 35 U.S.C. 112 as failing to comply with the written description requirement and as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-5, 7-12 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Mima et al. (US 2002/0101604 A1).

Claims 1-5, 7-12 and 17 are Distinguished From the Cited Art

The present application is distinguishable from Mima et al. because Mima et al. discloses a method for determining which printer is available to perform printing in an environment where a plurality of printers are connected to a network. In contrast, the present application teaches a method for determining an optimal batch size for processing a print job(s) in a printing environment, such as a printshop.

A distinction between Mima et al. and the present application is that the present application prints the entire print job in completion at one printer, whereas Mima et al. breaks the document into a plurality of separate pieces to be printed at a plurality of printers. Moreover, Mima et al. provides completed printing of a document at a plurality of printers, whereas the present application provides completed production of the print job. In addition, the present application breaks up the entire print job into steps such as printing, copying, binding, collating, hole-punching, shrink-wrapping, etc. where documents from these multiple sources can

then be assembled into a single entity. Further, the present application splits each job into batches, where subsequently each batch is then processed through all of the steps of the workflow in a serial sequence of operations by the same group of equipment, until the entire job is completed for that individual batch and lastly all of the batches that make up that specific job.

With attention to rejected independent claims 1 and 8, Mima et al. is applied for its disclosure of a printing process and more particularly an application of a mobile agent technology to a printing process. However, the present application teaches a method for determining optimal batch sizes for processing print jobs in a printing environment, where the batches are processed separately and concurrently in a serial sequence of operations to complete the processing of the job. Further, the present application breaks up the job into batches to minimize production time, wherein each batch is finished in whole and is a complete product after going through its processing. The size of the batches is based in part on the time it takes the equipment to fully process each batch and the time it takes the printing environment to switch from processing one batch to another for each operation that is required to complete the print job. Whereas, Mima et al. breaks up, essentially, the equivalent of a batch into further separate parts and prints them out in separate locations, so that the user must retrieve the whole print job from several different locations.

Further, Mima et al. teaches the use of mobile agents (col. 6, paragraph 0039), such as a printer monitor (col. 2, paragraphs 0013 and 0014) and a document monitor (col. 3, paragraph 0017 and col. 6, paragraph 0041). Mima et al. utilizes printing job agents which are assigned by the document monitor to printers that are the most suitable for the printing job at that time, and then printing is preformed by the individual printers (col. 3, paragraph 0018). After the printing is complete, Mima et al. sends a notification to let the user know which printers printed which pages so that the user can collect his document (col. 4, paragraph 0023). In Mima et al., the user does not know where the separate parts of his document are until after they have been printed and the user has received a notification message (col. 8, paragraph 0049). In the present application, however, the user will know where each part of his document is because the present application specifically splits the document into separate batches for the purpose of minimizing the total time required for completing the processing of the print job.

Moreover, Mima et al. teaches a computer program that purposely divides a document into separate pieces and prints the individual pieces out to a variety of printers (as illustrated by the example under paragraph 0049 in col. 8), where after the user must go around to each printer to collect and assemble his single document (col. 5, paragraph 0029 and col. 8, paragraph 0050). However, the present application breaks the print jobs into specific batches to go through each step in the serial sequence of operations. Whereas, Mima et al. deals with a network printer system, which would be found in a typical company office, serving multiple users, computers, and printers, etc.

Applicant, thus, respectfully traverses the Examiner's interpretation of these claims. As claims 2-5, 7, 9-12, and 17 refer to and further define these now-distinguished claims, it is submitted that these claims are also distinguished.

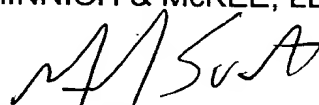
CONCLUSION

For the reasons detailed above, it is respectfully submitted all claims remaining in the application (Claims 1-5, 7-12 and 17) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Mark S. Svat, at Telephone Number (216) 861-5582.

Respectfully submitted,

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